DataFactZ Case Study

Cloud-Powered BI Transformation: Streamlining Operations and Cost

"A case study in how the latest technology can be leveraged as a cost-saving measure"

Industry
Agriculture Supply Chain

Technologies

Organizations are always looking to improve their operations with the most technologically advanced, yet most cost-effective solutions. This applies to the area of Business Intelligence and Reporting as well. It is quickly becoming a norm for companies to migrate their data to the cloud, and we can expect a similar trend for companies to use those cloud services for their BI and Reporting needs. DataFactZ had the opportunity to oversee this type of implementation for one of the Midwest's biggest food distribution companies.

The challenge

The client mentioned here had a heavy focus on inventory planning in warehouses across the country. The amounts of data generated on a daily basis were so large, that on-premise systems needed continuous infrastructure upgrades. They used Netezza to store their multi-dimensional data, and MicroStrategy 9.1 for Reporting and Business Intelligence. Rising maintenance costs from constant upkeep however, meant that migrating data and BI applications to a cloud-based platform was a must.

With a wealth of expertise in migrating large volumes of data, and handling Business Intelligence implementations, DataFactZ proposed a holistic solution that would migrate BI and data efficiently.

DataFactZ's Implementation Strategy

The solution architects at DataFactZ conducted thorough assessments of all inventory-related data and respective Business Intelligence reports. The study revealed that to efficiently implement this solution, a 'Lift and Shift' approach was not ideal. This approach meant that we were not only migrating data, but also the on-premise problems associated with it.

A more appropriate solution was to 'Assess, Select and Optimize' the data that generated business value and helped decision makers with information related to cost savings and loss prevention. Once the data was finalized, this data would be moved to cloud platform. The same approach was also considered for BI reports.

Assess and Optimize ⊕ ⊖ Lift and Shift

During this implementation, DataFactZ also focused on some core principles of desired end goals.

These were:
- Elastic infrastructure for growing data.
- High performance and reliability between report server and multi-dimensional data.
- Ability to serve reports to external users on a pay-per-use policy.

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Solution

• The most important piece in solving this puzzle lay in the need to choose a good cloud platform that could align with the nature and structure of the client's data, as well as choose a reporting technology that could be deployed on the cloud.

DataFactZ proposed two cloud-based technologies:

• Snowflake Data Warehouse, a product of Snowflake Computing Inc., to host inventory data on cloud.

• MicroStrategy Cloud, to deploy existing reports to the cloud, so they have a global reach.
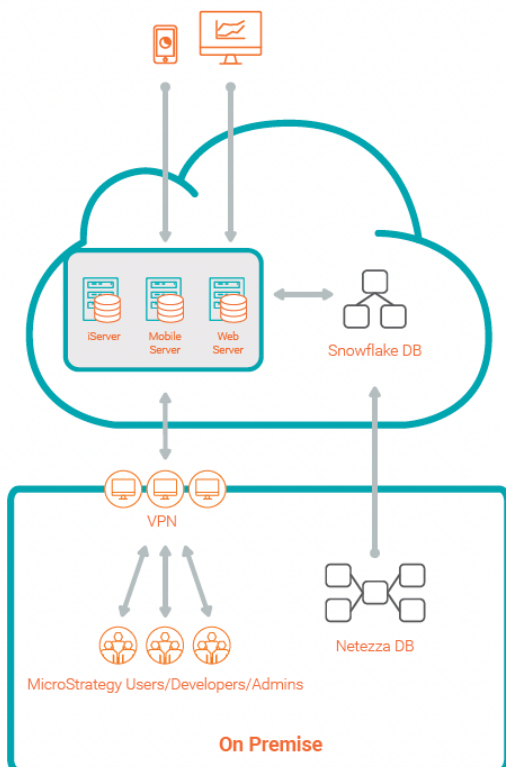
Since inventory data was exclusively stored in a warehouse hosted on Netezza, our first step was to migrate all inventory data worthy of any value to a schema modeled in Snowflake Data Warehouse. Next, we implemented a 'Sync-Up' process where on-premise ETL jobs loaded data into the Snowflake database for direct cloud reporting.

Our next step was to test cloud data with existing on premise MicroStrategy reports. A special Snowflake driver was used to connect to inventory data on the cloud. All reports that were successfully validated for data quality and data accuracy were shortlisted for the first push of reports to the MicroStrategy cloud.

An important outcome of this approach was to allow the client to share critical business information with vendors through the cloud based BI service. Through these cost saving, loss reduction, and prevention techniques, our client saw big benefits. They also saw a huge surge in infrastructure cost savings, as the platform allowed for elastic ("use as you need" versus "use as you want") scaling of data and usage.

Conclusion

Migrating to the cloud can be a bold move for some organizations, and one that can be the right choice for rapidly growing companies. From data migration to the cloud to end user reporting needs, all were tackled with minimum impact and maximum output. With deep expertise in both data engineering and BI, DataFactZ was the perfect partner to both determine the ideal approach as well as equip the client with scalable solutions in the most cost effective manner.

The Next Step

Request a 1 on 1 solution demo:
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